

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of : **BOX PATENT APPLICATION**

Christophe LEROY et al. : Group Art Unit.: Unassigned

Serial No.: Unassigned : Examiner: Unassigned

Filed: February 6, 2001 :

For: **MULTILAYER STRUCTURE AND TANK CONSISTING OF THIS STRUCTURE,  
WHICH HAS A BARRIER LAYER IN DIRECT CONTACT WITH THE FLUID  
CONTAINED**

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

SIR:

Prior to examination, Applicants wish to amend the above-identified application as indicated below.

**IN THE ABSTRACT**

Please delete the existing Abstract and replace with the attached new Abstract of the Disclosure.

**IN THE SPECIFICATION**

Please amend the specification as follows:

**Page 1, Line 1:** Delete "[Field of the invention]" and insert **--Field of the Invention--**.

**Page 1, Line 23:** Delete "[Prior art]" and insert **--Background of the Invention--**.

**Page 2, Line 31:** Delete "[The technical problem]" and insert **--Summary of the Invention--**.

**Page 3, Line 6:** Delete “[Brief description of the invention] and insert  
-- Upon further study of the specification and appended claims, further objects and advantages of this invention will become apparent to those skilled in the art. --

**Page 3, Line 21:** Delete “[Detailed description of the invention]”.

**Page 27, line 33, insert**

-- In the foregoing and in the following examples, all temperatures are set forth uncorrected in degrees Celsius; and, unless otherwise indicated, all parts and percentages are by weight.

The entire disclosure of all applications, patents and publications, cited above and below, and of corresponding European application No. 00400327.3, filed February 7, 2000 is hereby incorporated by reference. --

**Page 27, Line 34:** Delete “[Examples]” and insert --**Examples**--.

#### **IN THE CLAIMS**

Please amend the claims as follows:

**Claim 3, Line 1:** Delete “either of Claims 1 and” and insert --Claim 1--.

**Line 2:** Delete “2”.

**Claim 5, Line 1:** Delete “or 4”.

**Claim 6, Line 1:** Delete “either of Claims 1 and” and insert --Claim 1--.

**Line 2:** Delete “2”.

**Claim 7, Line 1:** Delete “or 2”.

**Claim 9, Line 1:** Delete “or 2”.

**Claim 10, Line 1:** Delete “any one of the preceding” and insert Claim 1--.  
**Line 2:** Delete “claims”.

11. (Amended) Structure according to [any one of the preceding claims] Claim 1, in which the [polyolefin (B) of the] third layer comprises a polyolefin (B) which comprises (i) a high density polyethylene (HDPE) and (ii) a mixture of a polyethylene (C1) and a polymer (C2) chosen from elastomers, very low density polyethylenes and ethylene copolymers, the mixture (C1) + (C2) being co-grafted with an unsaturated carboxylic acid.

12. (Amended) Structure according to [any one of Claims 1 to 10, in which the polyolefin (B) of] Claim 1, wherein the third layer comprises a polyolefin (B) which comprises (i) a high density polyethylene (HDPE), (ii) a polymer (C2) chosen from elastomers, very low density polyethylenes and ethylene copolymers (C2) being grafted with an unsaturated carboxylic acid and (iii) a polymer (C2) chosen from elastomers, very low density polyethylenes and ethylene copolymers.

13. (Amended) Structure according to [any one of Claims 1 to 10, in which the polyolefin (B) of] Claim 1, wherein the third layer comprises a polyolefin (B) which comprises (i) polypropylene and (ii) a polyolefin which results from the reaction of a polyamide (C4) with a copolymer (C3) comprising propylene and a grafted or copolymerized unsaturated monomer X.

14. (Amended) Structure according to [any one of Claims 1 to 10, in which the polyolefin (B) of] Claim 1, wherein the third layer comprises a polyolefin (B) which comprises (i) a polyethylene of LLDPE, VLDPE or metallocene type and (ii) an ethylene-alkyl (meth)acrylate-maleic anhydride copolymer.

**Claim 15, Line 1:** Delete “any one of Claims 1 to” and insert --Claim 1--.  
**Line 2:** Delete “10”.

16. (Amended) Structure according to Claim 15, in which the [polyolefin (B) of] the third layer comprises a polyolefin B, which comprises (i) a polyethylene of LLDPE, VLDPE or metallocene type and (ii) an ethylene-alkyl (meth)acrylate-maleic anhydride copolymer.

17. (Amended) Structure according to Claim 15, in which the third layer comprises a polyolefin (B) which comprises two functionalized polymers comprising at least 50 mol% of ethylene units and which can react to form a crosslinked phase.

**Claim 18, Line 1:** Delete “Devices” and insert --A device--.

**Line 3:** Delete “the” and insert --a--; delete “any”.

**Line 4:** Delete “one of the preceding claims” and insert --Claim 1--.

**Please add the following new claim:**

-- 19. Structure according to Claim 2, in which the binder comprises:

- 5 to 30 parts of a polymer (D) which itself comprises a mixture of a polyethylene D1 with a density of between 0.910 and 0.940 and of a polymer (D2) chosen from elastomers, very low density polyethylenes and metallocene polyethylenes, the mixture (D1) + (D2) being co-grafted with an unsaturated carboxylic acid,

- 95 to 70 parts of a polyethylene (E) with a density of between 0.910 and 0.930,

- the mixture of (D) and (E) being such that:

- its density is between 0.910 and 0.930,

- the content of grafted unsaturated carboxylic acid is between 30 and 10,000 ppm,

- the MFI (ASTM D 1238 - 190°C - 2.16 kg) is between 0.1 and 3 g/10 min, the MFI denotes the melt flow index.

20. Structure according to Claim 2, in which the binder comprises:

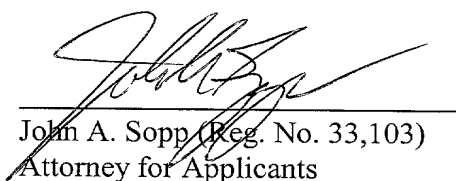
- 5 to 30 parts of a polymer (F) which itself comprises a mixture of a polyethylene (F1) with a density of between 0.935 and 0.980 and of a polymer (F2) chosen from elastomers, very low density polyethylenes and ethylene copolymers, the mixture (F1) + (F2) being co-grafted with an unsaturated carboxylic acid,

- 95 to 70 parts of a polyethylene (G) with a density of between 0.930 and 0.950,
- the mixture of (F) and (G) being such that:
  - its density is between 0.930 and 0.950,
  - the content of grafted unsaturated carboxylic acid is between 30 and 10,000 ppm,
  - the MFI (melt flow index) measured according to ASTM D 1238 at 190°C - 21.6 kg is between 5 and 100. --

### **REMARKS**

A principal purpose of this Preliminary Amendment is to remove the multiply dependent claims and avoid the fee associated therewith, Applicants reserving the right to reintroduce claims to canceled combined subject matter.

Respectfully submitted,

  
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